

## **CLAIMS**

What is claimed is:

1. A molded closure comprising:

a side wall having at least one cylindrical wall portion, said cylindrical wall portion having a first inner wall on which an auxiliary thread is disposed, said auxiliary thread being inwardly directed;

said side wall also having at least one principal thread being inwardly directed thereon;  
and,

said auxiliary thread being disposed at a first end of said side wall and said principal thread being disposed toward an opposed second end of said side wall .

2. The molded closure of claim 1, wherein said auxiliary thread is helical.

3. The molded closure of claim 1, wherein said side wall includes at least one tier.

4. The molded closure of claim 3, wherein said side wall includes a distal tier and a proximal tier, said distal tier including said first inner wall of said cylindrical wall portion and said proximal tier including a second inner wall, said auxiliary thread being disposed on said first inner wall and said principal thread being disposed on said second inner wall.

5. The molded closure of claim 1, wherein said auxiliary thread includes a first pitch and said principal thread includes a second pitch, said first pitch being unequal to said second pitch.

6. The molded closure of claim 1, wherein said auxiliary thread is incongruent with said principal thread.

7. A molded closure comprising:

a side wall having at least one cylindrical wall portion, said cylindrical wall portion having a first inner wall on which an auxiliary is disposed, said auxiliary thread being inwardly directed;

said side wall also having at least one principal thread, said principal thread being inwardly directed;

said auxiliary thread being disposed toward a first end of said side wall and said principal thread being disposed toward a second end of said side wall; and,

said auxiliary thread being incongruent to said principal thread.

8. The molded closure of claim 7, wherein said auxiliary thread is helical.

9. The molded closure of claim 7, wherein said side wall includes at least one tier.

10. The molded closure of claim 9, wherein said side wall includes a first tier and a second tier, said first tier including said first inner wall of said cylindrical wall portion and said second tier including a second inner wall, said auxiliary thread being disposed on said first inner wall and said principal thread being disposed on said second inner wall.

11. The molded closure of claim 7, wherein said auxiliary thread includes a first pitch and said principal thread includes a second pitch, said first pitch being unequal to said second pitch.

12. A molded closure comprising:

a side wall having at least one cylindrical wall portion, said cylindrical wall portion having an auxiliary inwardly directed thread disposed thereon, said auxiliary inwardly directed thread being helical;

said side wall also having at least one principal inwardly directed thread; and,

said auxiliary inwardly directed thread being disposed toward a first end of said side wall and said principal inwardly directed thread being disposed toward a second end of said side wall, said auxiliary inwardly directed thread having a first depth, said principal inwardly directed thread having a second depth, wherein said second depth is greater than said first depth.

13. The molded closure of claim 12, wherein said side wall includes at least one tier.

14. The molded closure of claim 13, wherein said side wall has a first tier and a second tier, said first tier including a first inner wall and said second tier including a second inner wall, said auxiliary inwardly directed thread being disposed on said first inner wall and said principal inwardly directed thread being disposed on said second inner wall.
15. The molded closure of claim 14, wherein said first depth is less than one-half the length of said second depth.
16. The molded closure of claim 12, wherein said auxiliary inwardly directed thread includes a first pitch and said principal inwardly directed thread includes a second pitch, said first pitch being unequal to said second pitch.
17. A molded closure comprising:
- a side wall having at least one cylindrical wall portion, said cylindrical wall portion having a first inner wall on which an auxiliary thread is disposed, said auxiliary thread being inwardly directed;
- said side wall also having at least one principal thread, said principal thread being inwardly directed;

said auxiliary thread being disposed toward a first end of said side wall and said principal thread being disposed toward a second end of said side wall; and,

said side wall having a first diameter intersecting a portion of said auxiliary thread and said side wall having a second diameter intersecting a portion of said principal thread, said first diameter being less than said second diameter.

18. The molded closure of claim 17, wherein said auxiliary thread is helical.

19. The molded closure of claim 17, wherein said side wall includes at least one tier.

20. The molded closure of claim 19, wherein said side wall includes a first tier and a second tier, said first tier including said first inner wall of said cylindrical wall portion and said second tier including a second inner wall, said auxiliary thread being disposed on said first inner wall and said principal thread being disposed on said second inner wall.

21. The molded closure of claim 17, wherein said auxiliary thread includes a first pitch and said principal thread includes a second pitch, said first pitch being unequal to said second pitch.

22. A molded closure, comprising:

a primary helical thread formed on a cylindrical side wall of said molded closure;

a separate auxiliary thread formed on said cylindrical side wall of said molded closure

along an upper periphery;

said primary helical thread having a first thread depth, said auxiliary thread having a second thread depth, said first thread depth being about double said second thread depth.

23. A molded closure having a primary thread and an auxiliary thread on an inner side wall, comprising:

a molded closure having an inwardly directed auxiliary helical thread and an inwardly directed primary helical thread, said auxiliary helical thread formed on a peripheral end of said molded closure, said auxiliary thread having a first thread depth, said primary thread having a second thread depth, said first thread depth less than said second thread depth;

said molded closure having a first and a second tier, said auxiliary thread formed on said first tier and said primary thread formed on said second tier;

wherein said auxiliary thread is a congruent helical thread and said primary thread is a congruent helical thread, said auxiliary thread incongruent with said primary thread.

24. A molded closure having a helical primary thread and a helical auxiliary thread, comprising:

a mold closure having a cylindrical wall portion, said cylindrical wall portion having an

outer wall;

an auxiliary core thread formed on said outer wall at an upper periphery and a primary core thread formed on said outer wall, said auxiliary core thread formed above said primary core thread and discontinuous therewith and further having a continuous wall section extending from said auxiliary core thread to said primary core thread.